Listing of claims:

Claims 1-33 (canceled)

Claim 34 (currently amended): A method of encoding a data stream, comprising the steps of:

partitioning ~~said~~ the data stream into ~~a plurality of~~ data packets at a transmission network center;

transmitting ~~said~~ the data packets to a broadcast generator;

receiving ~~said~~ the transmitted data packets at ~~said~~ the broadcast generator;

writing ~~said~~ the received data packets into an I/O memory of ~~said~~ the broadcast generator;

reading ~~a plurality of~~ extracted data packets from ~~said~~ the I/O memory in an order that differs from the order in which ~~said~~ the received data packets arrived at ~~said~~ the I/O memory block;

encoding ~~said~~ the extracted data packets into a first portion of encoded data streams for transmission at a first latency and a second portion of encoded data streams for transmission at a second latency, wherein the second latency is lower than the first latency; and

interleaving said first and second portions ~~of encoded data streams~~ over a broadcast frame that includes sub frames ~~that comprise interleaved segments of said first and second portions of encoded data streams, wherein the second portions of encoded data stream are interleaved within the sub frames,~~ wherein each sub frame includes data associated with the first portion and data associated with the second portion that are interleaved together, and wherein each of the extracted data packets that are associated with the first portion is interleaved across multiple subframes.

Claim 35 (original): The method of claim 34, further comprising the steps of:

determining whether a threshold amount of memory within said I/O memory has been filled by said received data packets; and

initiating encoding of said received data packets if said determination is affirmative.

Claim 36 (previously presented): The method of claim 34, wherein interleaving said first and second portions of encoded data streams over a broadcast frame further comprises interleaving individual packets of said first portion of encoded data streams into segments over the full broadcast frame and interleaving individual packets of said second portion of encoded data streams into segments over individual sub frames.

Claim 37 (previously presented): The method of claim 34, the encoding further comprising the steps of:

performing a bitwise-exclusive-OR between each bit of said extracted data packets and each bit of a data pattern to produce a plurality of whitened data streams; and

convolutionally encoding said whitened data streams thereby producing said encoded data streams.

Claim 38 (currently amended): A method of transmitting data, comprising the steps of:

receiving a data stream including a first portion of data packets for transmission at a first latency and a second portion of data packets for transmission at a second latency, wherein the second latency is lower than the first latency; and

_interleaving said the first and second portions of data packets over a broadcast frame that includes sub frames that comprise interleaved portions of said first and second portions of data packets, wherein the second portions of data packets are interleaved within the sub-frames, wherein each sub frame includes data associated with the first portion and data associated with the second portion that are interleaved together, and wherein each of the first portion of data packets is interleaved across multiple subframes.

Claim 39 (original): The method of claim 38, wherein said sub frame is one-fourth of said broadcast frame.

Claims 40-43 (canceled)

Claim 44 (previously presented): The method of claim 38, further comprising:

writing said plurality of data packets into an I/O memory;

reading said plurality of data packets from said I/O memory in an order that differs from the order in which said plurality of data packets arrived at said I/O memory; and

encoding said read data packets into encoded data streams, wherein said encoded data streams include said data packets that are interleaved over said broadcast frame.

Claim 45 (previously presented): The method of claim 44, further comprising:

performing a bitwise-exclusive-OR between each bit of said read data packets and each bit of a data pattern to produce a plurality of whitened data streams; and

convolutionally encoding said whitened data streams thereby producing said encoded data streams.

Claim 46 (previously presented): The method of claim 38, further comprising:

modulating the frame of interleaved data segments for transmission across an FM subcarrier to a mobile device when the mobile device is in a broadcast mode.

Claim 47 (currently amended): A method, comprising:

transmitting data packets of a data stream to a broadcast generator;

writing the received data packets into an input-output memory of the broadcast generator;

reading a plurality of extracted data packets from the input-output memory in an order that differs from the order in which the data packets arrived at the input-output memory;

encoding the plurality of extracted data packets into a first portion of encoded data streams for transmission at a first latency and a second portion of encoded data streams for transmission at a second latency, wherein the second latency is lower than the first latency;

interleaving the first and second portions of encoded data streams over a broadcast frame that includes sub frames that comprise interleaved segments of said first and

~~second portions of encoded data streams, wherein the second portions of encoded data stream are~~ ~~interleaved within sub-frames,~~ wherein each sub frame includes data associated with the first portion and data associated with the second portion that are interleaved together, and wherein each of the extracted data packets associated with the first portion is interleaved across multiple subframes;

modulating the broadcast frame to produce a subcarrier signal for transmission across an FM subcarrier to a mobile device when the mobile device is in a broadcast mode; and

receiving the subcarrier signal at the mobile device, wherein the subcarrier signal is processed to produce content on the mobile device.

Claim 48 (previously presented): The method of claim 47, further comprising:

determining whether a threshold amount of memory within the I/O memory has been filled by said received data packets; and

initiating encoding of the received data packets if the determination is affirmative.

Claim 49 (previously presented): The method of claim 47,

wherein interleaving said first and second portions of encoded data streams over a broadcast frame further comprises interleaving individual packets of said first portion of encoded data streams into segments over the full broadcast frame and interleaving individual packets of said second portion of encoded data streams into segments over individual sub frames.

Claim 50 (previously presented): The method of claim 47, the encoding further comprising:

performing a bitwise-exclusive-OR between each bit of the extracted data packets and each bit of a data pattern to produce a plurality of whitened data streams; and

convolutionally encoding the whitened data streams in producing the encoded data streams.

Claim 51 (previously presented): The method of claim 47, further comprising generating segment headers for each interleaved data segment, such that the segments are identifiable by the mobile device when the mobile device receives the subcarrier signal.

Claim 52 (previously presented): The method of claim 47, wherein modulating the broadcast frame further comprises modulation of the broadcast frame symbol by symbol under transmit clock timing.